

NASA HQ, MTPE Office,

Washington, DC 20546

Scientific Data Purchase Request for Information

POC – YF/Robert Kreider, 202-358-0743, [rkreider@mtpe.hq.nasa.gov](mailto:rkreider@mtpe.hq.nasa.gov)

This is a REQUEST FOR INFORMATION. NASA Headquarters' Office of Mission to Planet Earth (OMTPE) is charged by Executive and Legislative branches of the U.S. Government to conduct research leading to increased scientific understanding of natural and human-induced changes to the Earth system, especially those associated with global climate change. NASA seeks to expand scientific knowledge of the Earth system using its unique capabilities from the vantage points of space, aircraft, and in situ platforms.

MTPE scientific priorities and the associated data requirements needed to enable such knowledge are developed in conjunction with a broad scientific community and through processes established or approved by national level scientific and technology advisory boards and commissions. The Earth System Science approach adopted by NASA requires well calibrated and stable measurements of land, oceans, and atmosphere over a range of spatial (local, regional, and global) and temporal (seasons, annual, and decadal) scales. And, as part of its overall responsibilities, NASA provides a large national and international user community access to the basic data and higher level products and analyses that result from the NASA-sponsored research.

NASA is aware that some common needs are emerging among the scientific and private sector users of remotely sensed data. Current commercial remote sensing interest is focused on land and coastal regions. Future commercial demand appears to be evolving toward greater spectral coverage and developing products which combine high and low spatial resolution data sets covering large geographic regions. In particular, NASA seeks to exploit the advances in multi and hyperspectral remote sensing (ranging from ultraviolet to microwave) using both active and passive techniques to study Earth as an integrated and coupled system. Other areas of common interest will undoubtedly evolve in the future.

Given the possibility of increasing similarity in data requirements for scientific and commercial Earth observation satellites, NASA/OMTPE is reviewing options for acquiring some of its scientific data. This review includes the option of purchasing from non-government sources the data sets that meet NASA/MTPE scientific requirements.

This new approach is part of a focused commercial strategy to stimulate and leverage

commercial capabilities in order to cost-effectively meet MTPE science goals. The approach is responsive to goals outlined in the National Performance Review (NPR) including committing the government to establishing "new ways of doing government business." To support NPR reforms, a portion of NASA's FY 1997 budget has been identified for the purchase of MTPE scientific data. The primary goal is to obtain critical data set(s) which support MTPE science and applications objectives using appropriated funds set-aside for the possible purchase of data in the future.

The purpose of this RFI is to determine if the commercial sector can supply Earth observation data suitable to support NASA's basic and applied research in Earth System Science. The target respondent is the private sector which would be expected to deliver the initial data within the next two to four years. Such a data purchase must be cost-effective to the MTPE program. It is possible that this data purchase will support or enhance the development of a viable commercial market where NASA is not the only customer for such a service.

**The key element of this RFI is to explore the willingness of industry to accept a major portion of the upfront financial risk as a new way of doing business with the government.** A number of mechanisms toward achieving the key element of the RFI may be considered by respondents. These should be innovative ideas and may include: providing data through a fully developed industry capability with the first payment on the delivery of data; evolution to a commercial capability through shared risk initial investments where NASA participates as one of many shareholders having certain rights to a future data stream; or, partnership participation with NASA or other government science-focused or technology demonstration programs.

Interested parties should provide a letter of interest, five pages maximum, describing the existing or future data to be provided and how this data supports the land, oceans, or atmosphere requirements for Mission to Planet Earth global change research. Respondents may submit their own suggestions for criteria and a qualitative assessment of how their ideas would provide "best value" science. In addition, they should specify the spatial, spectral, and temporal coverage and the level of radiometric calibration that will be afforded by their systems and data. Also, it is requested that respondents provide an overall data management concept which identifies key considerations associated with potential U.S. Government redistribution and reproduction rights. The data providers should take into account the potential impact of such arrangements in considering the cost and terms and conditions for data provision. At a minimum interested parties should comment on their willingness to accept a major portion of the upfront financial risk.

**RESPONSES MAY BE USED BY NASA IN DEVELOPING A SOLICITATION FOR A COMPETITIVE SELECTION, THEREFORE PROPRIETARY BUSINESS**

INFORMATION SHOULD NOT BE INCLUDED IN YOUR RESPONSES.

It should be noted that if a subsequent solicitation is developed, a rigorous scientific peer review process will be conducted. More detailed information on the MTPE Program and its scientific focus and priorities can be found in:

- MTPE/EOS Reference Handbook ([http://spso.gsfc.nasa.gov/eos\\_reference/TOC.html](http://spso.gsfc.nasa.gov/eos_reference/TOC.html))
- MTPE Home Page (<http://www.hq.nasa.gov/office/mtpe>)

(RFI is under MTPE Research Announcements)

- MTPE Science Research Plan  
(<http://www.hq.nasa.gov/office/mtpe/draftsciplan/draftsciplan.html>)
- MTPE Strategic Plan (<http://www.hq.nasa.gov/office/nsp/NSPTOC.html>)

For additional information contact Robert Kreider, 202-358-0743,  
[rkreider@mtpe.hq.nasa.gov](mailto:rkreider@mtpe.hq.nasa.gov)

Please send responses by COB May 10, 1996 to:

**Scientific Data Purchase RF I**  
**Code Y**  
**400 Virginia Ave. SW**  
**Suite 700 Wash D.C. 20024**  
**202-554-2775 (For overnight service)**

**FAX -- 202-554-3024**

**EMAIL-- [scidata@jorge.hq.nasa.gov](mailto:scidata@jorge.hq.nasa.gov) (please -- no attachments)**